What is claimed is:

1. An ink for ink jet recording, comprising at least a water-soluble colorant, a water-soluble organic solvent, water, and a mixture of two or more compounds represented by formula (I):

R-[(EO)n-(PO)m]k-T

wherein

EO represents an ethyleneoxy group;

PO represents a propyleneoxy group;

T represents an OH group or SO_3M wherein M represents a hydrogen atom, an alkali metal, an inorganic base, or an organic amine;

m and n are each an integer;

k is a natural number of not less than 1; and

R represents

a C_aH_{2a-k-1} group where "a" represents natural number of 4 to 10,

an Ra-C_aH_{2a-k-2} group where "a" represents natural number of 4 to 10 and Ra represents a group represented by the following formula:

T-[(PO)m'-(EO)n']k-

wherein

EO, PO, T and k each are as defined above; and

n' and m' are respectively n and m,

EO and PO being arranged, regardless of order in the parentheses, randomly or as blocks joined together,

n or n + n' being 1 to 10 with m or m + m' being 0 to 5 when n and m and n' and m' are expressed in terms of the average value for the mixture of compounds represented by formula (I) contained in the ink, or

a group represented by the following formula:

K-M-O-

wherein K represents a saturated or unsaturated aromatic ring having 4 to 15 carbon atoms or a saturated or unsaturated aliphatic ring having 4 to 15 carbon atoms, M represents a bond or an alkylene group having 1 to 12 carbon atoms, and O represents an oxygen atom.

2. The ink according to claim 1, wherein the compounds, represented by formula (I), constituting the mixture each are such that R represents a C_aH_{2a-k-1} group and T represents a hydrogen atom.

3. The ink according to claim 1, wherein the compounds, represented by formula (I), constituting the mixture each are such that R represents an Ra-C_aH_{2a-k-2} group and T represents a hydrogen atom.

4. The ink according to claim 1, wherein the compounds, represented by formula (I), constituting the mixture each are such that R represents a C_aH_{2a-k-1} group and T represents SO_3M.

5. The ink according to claim 1, wherein the compounds, represented by formula (I), constituting the mixture each are such that R represents a C_aH_{2a-k-1} group, EO represents $-CH_2CH_2O-$, PO represents $-CH(CH_3)-CH_2O-$, and T represents a hydrogen atom, R, EO, PO, and T being attached to one another in that order to represent formula R-(EO)n-(PO)m-T.

6. The ink according to claim 1, wherein the mixture of compounds represented by formula (I) is composed of:

a compound represented by formula (I) wherein R represents a C_aH_{2a-k-1} group and T represents a hydrogen atom, R, EO, PO, and T being attached to one another in that order to represent formula R-(EO)n-(PO)m-T; and

a compound represented by formula (I) wherein R represents a C_aH_{2a-k-1} group and T represents a hydrogen atom, R, EO, PO, and T being attached to one another in that order to represent formula R-(PO)m-(EO)n-T.

7. The ink according to claim 1, wherein n and m in the mixture of compounds represented by formula (I) satisfy $n/m \geqq 0.5$.

8. The ink according to claim 1, wherein the compound represented by formula (I) has an average molecular weight of not more than 2000.

9. The ink according to claim 1, wherein the mixture of compounds represented by formula (I) is composed of:

a compound represented by formula (I) wherein R

represents a butyl, pentyl, hexyl, heptyl, octyl, nonyl, or decyl group; and

a compound represented by formula (I) wherein R represents a butyl, pentyl, hexyl, heptyl, octyl, nonyl, or decyl group.

10. The ink according to claim 1, wherein R represents a straight-chain or branched C_aH_{2a-k-1} group.

11. The ink according to claim 1, wherein the compounds, represented by formula (I), constituting the mixture each are such that R represents the group K-M-O- and T represents a hydrogen atom.

12. The ink according to claim 11, wherein K represents a saturated or unsaturated aromatic ring having 4 to 15 carbon atoms or a saturated or unsaturated aliphatic ring having 4 to 15 carbon atoms, M represents a bond or an alkylene group having 1 to 12 carbon atoms, and O represents an oxygen atom.

13. The ink according to claim 1, which further comprises 0 to 10% by weight of (di)propylene glycol monobutyl ether.

14. The ink according to claim 13, wherein the weight ratio of the compound represented by formula (I) to (di)propylene glycol monobutyl ether is 1 : 0 to 1 : 10.

15. The ink according to claim 1, which further comprises 0 to 5% by weight of an acetylene glycol surfactant.

16. The ink according to claim 15, wherein the weight ratio of the compound represented by formula (I) to the acetylene glycol surfactant is 1 : 0 to 1 : 3.

17. The ink according to claim 1, which further comprises 0 to 20% by weight of di(tri)ethylene glycol monobutyl ether.

18. The ink according to claim 17, wherein the weight ratio of the compound represented by formula (I) to di(tri)ethylene glycol monobutyl ether is 1 : 0 to 1 : 10.

19. The ink according to claim 1, wherein the water-soluble colorant is a water-soluble dye and/or a water-soluble pigment dispersible in water.

20. An ink jet recording method comprising the steps

of: ejecting a droplet of an ink; and depositing the droplet onto a recording medium to perform printing, wherein the ink is one according to claim 1.

21. A recorded medium recorded by the ink jet recording method according to claim 20.

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